

GenCore version 5.1.3
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OM nucleic - nucleic search, using sw model

Run on: October 9, 2002, 14:25:23 ; Search time 4127 seconds
(without alignments)
17219.898 Million cell updates/sec

Title: US-09-635-501-1
Perfect score: 3396
Sequence: 1 gaattcggttcctcctctaa.....aaaaaaaaagggcgccgc 3396

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1797656 seqs, 10463268293 residues

Total number of hits satisfying chosen parameters: 3595312

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

GenEmbl:*

- 1: gb_ba.*
- 2: gb_htg.*
- 3: gb_in.*
- 4: gb_om.*
- 5: gb_ov.*
- 6: gb_pat.*
- 7: gb_ph.*
- 8: gb_pl.*
- 9: gb_pr.*
- 10: gb_ro.*
- 11: gb_scs.*
- 12: gb_sy.*
- 13: gb_un.*
- 14: gb_vi.*
- 15: em_ba.*
- 16: em_fun.*
- 17: em_hum.*
- 18: em_in.*
- 19: em_mu.*
- 20: em_om.*
- 21: em_or.*
- 22: em_ov.*
- 23: em_pat.*
- 24: em_ph.*
- 25: em_pl.*
- 26: em_ro.*
- 27: em_scs.*
- 28: em_un.*
- 29: em_vi.*
- 30: em_htg_hum.*
- 31: em_htg_inv.*
- 32: em_htg_other.*
- 33: em_htgo_inv.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description

1	3396	100.0	3396	6	AR135177	AR135177 Sequence
2	3323.4	97.9	3325	9	AF291820	AF291820 Homo sapi
3	3322.2	97.8	3405	9	AF241254	AF241254 Homo sapi
4	3309.8	97.5	3334	6	AX047758	AX047758 Sequence
5	3293.4	97.0	3341	9	HSMB00880	AL110224 Homo sapi
6	2561	75.4	2599	6	E43988	E43988 ACE-analogo
7	2556.2	75.3	2599	9	AB046569	AB046569 Homo sapi
8	2416.4	71.2	2418	6	E39033	E39033 MPROT15 pol
9	2415	71.1	2415	6	AR135178	AR135178 Sequence
10	2413.4	71.1	2415	6	E43987	E43987 ACE-analogo
11	1922.2	56.6	2262	6	E39034	E39034 MPROT15 pol
12	1890.2	55.7	2638	6	AX047762	AX047762 Sequence
13	1885.4	55.5	2638	6	AX047765	AX047765 Sequence
14	1867.2	55.0	2760	10	AB053181	AB053181 Mus muscu
15	1782.4	52.5	2415	6	AX047760	AX047760 Sequence
16	1535.4	45.2	2415	6	AX047764	AX047764 Sequence
17	982.8	28.9	159446	9	AC003669	AC003669 Homo sapi
18	982.8	28.9	193615	2	AC058807	AC058807 Homo sapi
19	813	23.9	1993	10	AB053182	AB053182 Mus muscu
20	788.2	23.2	1013	9	AK026461	AK026461 Homo sapi
21	327.2	9.6	4142	10	RN003734	U03734 Rattus norv
22	324	9.5	4014	10	AF201331	AF201331 Rattus no
23	324	9.5	4014	10	AF201332	AF201332 Rattus no
24	324	9.5	4014	10	RN003708	U03708 Rattus norv
25	323.2	9.5	4020	6	AR137383	AR137383 Sequence
26	323.2	9.5	4020	9	HUMAICB	J04144 Human angio
27	321.6	9.5	4024	6	A00914	A00914 H.sapiens g
28	320.4	9.4	2418	10	MUSACEC	M55333 Mouse test
29	320.4	9.4	3813	10	MUSACEA	J04946 Mouse angio
30	320.4	9.4	3939	6	AX147531	AX147531 Sequence
31	320.4	9.4	4563	6	AX147503	AX147503 Sequence
32	320.4	9.4	4694	10	MUSACEB	J04947 Mouse angio
33	310.2	9.1	4050	5	CHKACEI	L40175 Gallus gall
34	291	8.6	467	6	AR038862	AR038862 Sequence
35	287.4	8.5	2473	9	HUMTACEA	M26657 Human testi
36	286.2	8.4	191453	2	AL671706	AL671706 Mus muscu
37	286.2	8.4	245087	2	AC091606	AC091606 Mus muscu
38	285.8	8.4	2477	9	HSACE	X16295 Human mRNA
39	285.8	8.4	2478	6	A31567	A31567 H.sapiens t
40	285.8	8.4	2478	6	AR037213	AR037213 Sequence
41	270.6	8.0	2490	9	HUMTACEB	M26658 Human testi
42	270	8.0	2409	4	RABACEA	J05041 Rabbit angli
43	268.4	7.9	4803	4	OCANCEO	X62551 O.cuniculus
44	257.6	7.6	2551	9	HUMTACEC	M29981 Human aberr
45	250.4	7.4	2082	6	AR166376	AR166376 Sequence

ALIGNMENTS

RESULT 1	AR135177	3396 bp	DNA	linear	PAT 16-MAY-2001
LOCUS	AR135177	Sequence 1 from patent US 6194556.			
DEFINITION	AR135177	Accession			
ACCESSION	AR135177	Version			
VERSION	AR135177.1	GI:14124082			
KEYWORDS					
SOURCE	Unknown.				
ORGANISM	Unknown.				
REFERENCE	1 (bases 1 to 3396)				
AUTHORS	Acton,S.Laurene and Robison,K.Earl.				
TITLE	Angiotensin converting enzyme homolog and therapeutic and diagnostic uses therefor				
JOURNAL	Patent: US 6194556-A 1 27-FEB-2001;				
FEATURES	Location/Qualifiers				
source	1..3396				
BASE COUNT	1034 a 659 c 772 g 931 t				
ORIGIN					

Query Match 100.0%; Score 3396; DB 6; Length 3396;
Best Local Similarity 100.0%; Pred. No. 0;

Matches 3396; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 GAATTCGGGCTCCATCCTAATACGACTCACTATAGGGCTCGAGCGCCGCCGGGGCAGG 60
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Db 61 TATCTTGGGTACAGGGGACGATGTCAGCTCTTCTGTGGCTCCTCTCAGCCCTTGTGCT 120
QY 121 GTAACCTGCTGCTCAGTCCACCATGAGGAACAGGCCAAGACATTTTGGACAAAGTTTAA 180
Db 121 GTAACCTGCTGCTCAGTCCACCATGAGGAACAGGCCAAGACATTTTGGACAAAGTTTAA 180
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Db 181 CACGAAGCGGAAGACCTGTCTTATCAAAAGTTTCACCTTGTCTTGGAAATTAACACCAAT 240
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Db 241 ATTACTGAAGAAATGTCCTCAAAACATGAATGCTGGGGACAAATGGTCTGCCTTTTAA 300
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Db 361 AAGCTTCAGCTCGAGGCTCTTCAAGAAAATGGGCTCTTCAAGTGTGTCAGAAAGCAAGAGC 420
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Db 421 AAAGGCTTGAACACAAATCTCAATACAATGAGCACCACCTACAGTACTCGNAAGTTTCT 480
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Db 541 AACAGTTTACACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGGTCGGC 600
QY 601 AAGCAGCTGAGGCAATATATGAAGAGTATGTTGCTTGAAGAAATGAGATGCCAAGAGCA 660
Db 601 AAGCAGCTGAGGCAATATATGAAGAGTATGTTGCTTGAAGAAATGAGATGCCAAGAGCA 660
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Db 901 TTTTGGACAAATCTGTACTCTTTGACAGTTCCCTTTGGACAGAAACCAACATAGATGTT 960
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QY 1201 CATGAGATGGGCAATCCAGTATGATATGGCATATGCTGCAACACCTTTTCTGCTAAGA 1260
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Db 1381 ACAGAAATAAATCTTCTGCTCAAAACAGCACTACAGATTGTTGGGACTCTGCCATTTACT 1440
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Db 1501 ATGAAAAGTGTGGGAGATGAAGCAGAGATAGTTGGGCTGGTGAACCTGTGCCCCAT 1560
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Db 1681 AAACATGAAGGCGCTCTGCACAAATGTGACATCTCAAACTCTACAGAACTGACAGAGAA 1740
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Db 1801 GTAGGAGCAAGAGACATGAATGTTAAGGCCACTGCTCAACTACTTTTGGCCCTTATTTACC 1860
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Db 1921 GCAGACCAAGCATCAAGTGAGGATGAAGCTTAAATCAGCTCTTGGAGATAAAGCATAT 1980
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Db 1981 GAATGAAACGACAAATGAAATGTACCTGTTCCGATCATCTGTTGCATATGCTATGAGGCAG 2040
QY 2041 TACTTTTTTAAAGTAAAAATCAGATGATTCCTTTTTGGGAGGAGGATGTGCGAGTGGCT 2100
Db 2041 TACTTTTTTAAAGTAAAAATCAGATGATTCCTTTTTGGGAGGAGGATGTGCGAGTGGCT 2100
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 Db 61 TAACTGCTGCTAGTCCACCATTTGAGAACAGSCCAAGACATTTTGGACAAAGTTTAAACC 120
 QY 182 ACCAAGCCGAAGACCTGCTTCTATCAAAAGTTTCACTGCTTCTTGGAAATTAACACACCAATA 241
 Db 121 ACCAAGCCGAAGACCTGCTTCTATCAAAAGTTTCACTGCTTCTTGGAAATTAACACACCAATA 180
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 QY 302 AGGAACAGTCCACACTTGGCCAAATGTATCCACTACAGAAATTCAGAAATCTCAGAGTCA 361
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 Db 361 AACGGTTGAACACAAATCTAAATACAAATGAGCACCATCTACAGTACTGGAAAAGTTTGT 420
 QY 482 ACCCAGATAATCCACAAAGTCTTATTAATGAACAGGTTTGAATGAATTAATGGCAA 541
 Db 421 ACCCAGATAATCCACAAAGTCTTATTAATGAACAGGTTTGAATGAATTAATGGCAA 480
 QY 542 ACAGTTAGACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGTGGCA 601
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 Db 541 AGCAGCTGAGGCCATTAATGAAGAGTATGTGCTTTGAAAATGAGATGGCAAGAGCAA 600
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 QY 1442 ACATGTTAGAGAAGTGGAGTGGTCTTTTAAAGGGGAAATTTCCCAAGACCAAGTGA 1501
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 Db 1681 TGTTCATATGCTGAGGCTTGGAAATCAGAACCTTGACCTTACATTTGGAATTTGTTG 1740
 QY 1802 TAGGACCAAGAACATGAATGTAGGCACTGCTCAACTTCTGAGCCCTTATTTACCT 1861
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 QY 1922 CAGACCAAGCATCAAAAGTGGGATAAGCCTTAAATCAGCTCTTGAGATAAAGCATATG 1981
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 QY 1982 AATGGACGACAAATGAAATGTACCTGTTCCGATCATCTGTTGCATATGCTATGAGGAGT 2041
 Db 1921 AATGGACGACAAATGAAATGTACCTGTTCCGATCATCTGTTGCATATGCTATGAGGAGT 1980
 QY 2042 ACTTTTAAAGTAAAAATCAGATGATTTTGGGAGGAGGATGTCGAGTGGCTA 2101
 Db 1981 ACTTTTAAAGTAAAAATCAGATGATTTTGGGAGGAGGATGTCGAGTGGCTA 2040
 QY 2102 ATTTGAACCAAGATCTCCTTCTTAAATTTCTGTCACCTGACCTTAAATGCTGCTGATA 2161
 Db 2041 ATTTGAACCAAGATCTCCTTCTTAAATTTCTGTCACCTGACCTTAAATGCTGCTGATA 2100
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 Db 2101 TCATTCCTAGAACCTGAAAGTGTGAAAGGCGCATCAGGATGTCCGGAGCCGCTATCAATGATG 2160
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 Db 2161 CTTTCCCTGTAATGACAAAGCCTTAGATTTCTGGGGATACAGCCCAACACTTTGGACCTC 2220
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QY 2522 GAGGTGATTTGTTGTTGTTAAATGTTAAATTCATGGTATAGAAAAATATAAGATGATAA 2581
Db 2461 GAGGTGATTTGTTGTTGTTAAATGTTAAATTCATGGTATAGAAAAATATAAGATGATAA 2520
QY 2582 GATATCATTAATGTCAAAACATGACTCTGTTCAGAAAAAAATGTCGAAAGACAACA 2641
Db 2521 GATATCATTAATGTCAAAACATGACTCTGTTCAGAAAAAAATGTCGAAAGACAACA 2580
QY 2642 TGGCCAGGAGAGACATCTTCATGACATTCCTTCAGTATTTATTCCTGCTCTGGAT 2701
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QY 3062 GGTGACAGGCTTAAAGAGAGAGAAATCCAGGAACAGGTAGAGGACATTTCTTTTCACT 3121
Db 3001 GGTGACAGGCTTAAAGAGAGAGAAATCCAGGAACAGGTAGAGGACATTTCTTTTCACT 3060
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QY 3182 AACTCCAGAGCATGCTGATAGAACTCATTTCTACTGTTTCTTAACCTGTGAGTGAAT 3241
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QY 3242 GGAATTTCCAACTGTATGTTCACTCCCTGAGTGGTACCCAGTCTCTTAATCTTTTGT 3301
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LOCUS
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VERSION
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KEYWORDS
SOURCE
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human.
Homo sapiens
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 (bases 1 to 3405)
AUTHORS
Tipnis, S.R., Hooper, N.M., Hyde, R., Karran, E., Christie, G. and Turner, A.J.
TITLE
A human homolog of angiotensin-converting enzyme. Cloning and functional expression as a captopril-insensitive carboxypeptidase
J. Biol. Chem. 275 (43), 33238-33243 (2000)
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AUTHORS
Tipnis, S.R., Hooper, N.M., Hyde, R.J., Christie, G., Karran, E. and Turner, A.J.
TITLE
Direct Submission
Submitted (02-MAR-2000) School of Biochemistry and Molecular Biology, University of Leeds, Mount Preston Street, Leeds, West Yorkshire LS5 9JT, UK
JOURNAL
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QY 2124 TAATTTCTTTGTGCACATGACCTTAAATAATGTCTGTGATATCATTCCTAGAACTGAAGTTGA 2183
Db 2042 TAATTTCTTTGTGCACATGACCTTAAATAATGTCTGTGATATCATTCCTAGAACTGAAGTTGA 2101
QY 2184 AAAGGCCATCAGGATGTCCTGGAGCGGTATCAATGATGCTTCCGTCTGATGACACAG 2243
Db 2102 AAAGGCCATCAGGATGTCCTGGAGCGGTATCAATGATGCTTCCGTCTGATGACACAG 2161
QY 2244 CCTAGAGTTCTGGGATACAGCCACACCTTGACCTTAAACAGCCCTCTGTTTCCAT 2303
Db 2162 CCTAGAGTTCTGGGATACAGCCACACCTTGACCTTAAACAGCCCTCTGTTTCCAT 2221
QY 2304 ATGGCTGATGTTTGGAGTGTGTGATGGGAGTGTAGTGGTGGCATTTGTCATCCTGAT 2363
Db 2222 ATGGCTGATGTTTGGAGTGTGTGATGGGAGTGTAGTGGTGGCATTTGTCATCCTGAT 2281
QY 2364 CTTTCACTGGGATCAGAGATCGGAAGAGAAATAAAGCAAGAAAGTGGAGAAAATCCTTA 2423
Db 2282 CTTTCACTGGGATCAGAGATCGGAAGAGAAATAAAGCAAGAAAGTGGAGAAAATCCTTA 2341
QY 2424 TGCCTCCATCGATATTAGCAAGAGGAGAAATAATCCAGGATTCACAAACACTGATGATGT 2483
Db 2342 TGCCTCCATCGATATTAGCAAGAGGAGAAATAATCCAGGATTCACAAACACTGATGATGT 2401
QY 2484 TCAGACCTCCTTTTAGAAAAATCTATGTTTTCCTCTTGGAGTGAATTTTGTGTATGTA 2543
Db 2402 TCAGACCTCCTTTTAGAAAAATCTATGTTTTCCTCTTGGAGTGAATTTTGTGTATGTA 2461
QY 2544 ATGTTAAATTTTCATGGTATAGAAAAATAAAGATGATAAAGATATCAATTAATGTCAAAAT 2603
Db 2462 ATGTTAAATTTTCATGGTATAGAAAAATAAAGATGATAAAGATATCAATTAATGTCAAAAT 2521
QY 2604 ATGACTCTGTTTCAGAAAAATAATTTGTCAAAGACAACTGTCACAGGAGAGAGATCTTC 2663
Db 2522 ATGACTCTGTTTCAGAAAAATAATTTGTCAAAGACAACTGTCACAGGAGAGAGATCTTC 2581
QY 2664 ATTGACATGCTTTTCAGTATTTTATTTCTGCTCTGATTTGACTTCTGTTCTTCTTTA 2723
Db 2582 ATTGACATGCTTTTCAGTATTTTATTTCTGCTCTGATTTGACTTCTGTTCTTCTTTA 2641
|||||

Db	794	AGTTGATGAATGCCCTATCCCTTCCCTATATACAGTCCCAATGGATGCCCTCCCTGCTCATTTGC	853
Qy	881	TTGTTGATATGTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTGGAC	940
Db	854	TTGGTTGATATGTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTGGAC	913
Qy	941	AGAAACCAACATAGATGTTACTGATGCCAATGGTGGACGAGCCCTGGGATGCACAGCAA	1000
Db	914	AGAAACCAACATAGATGTTACTGATGCCAATGGTGGACGAGCCCTGGGATGCACAGAA	973
Qy	1001	TATTCAGAGGCCCGAGAGTTCTTTGTATCTTGTGGTCTTCTTATATGACTCAAGGAT	1060
Db	974	TATTCAGAGGCCCGAGAGTTCTTTGTATCTTGTGGTCTTCTTATATGACTCAAGGAT	1033
Qy	1061	TCTGGAAAAATPCCATGCTAAACGGACCCAGGAAATGTTCAGAAAGCAGTCTGCCATCCCA	1120
Db	1034	TCTGGAAAAATPCCATGCTAAACGGACCCAGGAAATGTTCAGAAAGCAGTCTGCCATCCCA	1093
Qy	1121	CAGCTTTGGGACCTGGGGAGGCGACTTCAGGATCCCTATGTGCACAAAGGTGACAATGG	1180
Db	1094	CAGCTTTGGGACCTGGGGAGGCGACTTCAGGATCCCTATGTGCACAAAGGTGACAATGG	1153
Qy	1181	ACGACTTCTGCACGCTCATCATGAGATGGGCGATATCCAGTATGATATGGCATATGCTG	1240
Db	1154	ACGACTTCTGCACGCTCATCATGAGATGGGCGATATCCAGTATGATATGGCATATGCTG	1213
Qy	1241	CACAACCTTTTCTGCTAAGAAATGGAGCTAATGAAGGATTCCATGAAGCTGTTTGGGAAA	1300
Db	1214	CACAACCTTTTCTGCTAAGAAATGGAGCTAATGAAGGATTCCATGAAGCTGTTTGGGAAA	1273
Qy	1301	TCATGTCTACTTTCTGCAGCCACACCTAAGCAATTTAAATGCCATTTGTTCTGTCAACCG	1360
Db	1274	TCATGTCTACTTTCTGCAGCCACACCTAAGCAATTTAAATGCCATTTGTTCTGTCAACCG	1333
Qy	1361	ATTTTCAAGAGACATGAACAGAAATAAATCTCTGCTCAACAGCACTCAAGATTG	1420
Db	1334	ATTTTCAAGAGACATGAACAGAAATAAATCTCTGCTCAACAGCACTCAAGATTG	1393
Qy	1421	TTGGGACTCTGCCATTACTTTACATGTTTASAGAAATGGAGGTGGATGGTCTTTAAAGGGG	1480
Db	1394	TTGGGACTCTGCCATTACTTTACATGTTTASAGAAATGGAGGTGGATGGTCTTTAAAGGGG	1453
Qy	1481	AAATTTCCAAAGACCAAGTGGATGAAAAAGTGTGGGAGATGAAGCGAGAGATAGTTGGGG	1540
Db	1454	AAATTTCCAAAGACCAAGTGGATGAAAAAGTGTGGGAGATGAAGCGAGAGATAGTTGGGG	1513
Qy	1541	TGTTGGAAACCTGTGCCCATGATGAACATACTGTGACCCCGCATCTCTGTTCCATGTTT	1600
Db	1514	TGTTGGAAACCTGTGCCCATGATGAACATACTGTGACCCCGCATCTCTGTTCCATGTTT	1573
Qy	1601	CTAATGATTTACTTCATTTCATTCCATATTACACAAGGACCTTTACCAATTTCCAGTTCAAG	1660
Db	1574	CTAATGATTTACTTCATTTCATTCCATATTACACAAGGACCTTTACCAATTTCCAGTTCAAG	1633
Qy	1661	AAGCACTTTGTCAAGCAGCTAATAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACT	1720
Db	1634	AAGCACTTTGTCAAGCAGCTAATAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACT	1693
Qy	1721	CTACAGAAGCTGGACAGAAACTGTTCCATATGCTGAGGCTTGGAAAAATCAGAACCCCTGGA	1780
Db	1694	CTACAGAAGCTGGACAGAAACTGTTCCATATGCTGAGGCTTGGAAAAATCAGAACCCCTGGA	1753
Qy	1781	CCCTAGCATTTGAAAAATGTTGTAGGAGCAAGAACATGAATGTAAGGCCACTGCTCAACT	1840
Db	1754	CCCTAGCATTTGAAAAATGTTGTAGGAGCAAGAACATGAATGTAAGGCCACTGCTCAACT	1813
Qy	1841	ACTTTGAGCCCTTATTTACTCGCTGAAAGACAGAAACAGAAATTTCTTTTGTGGGATGGA	1900
Db	1814	ACTTTGAGCCCTTATTTACTCGCTGAAAGACAGAAACAGAAATTTCTTTTGTGGGATGGA	1873
Qy	1901	GTACCGACTGGAGTCCATATGACAGCAAAAGCATCAAGTGGAGATGAAGCCTAAAAATCAG	1960
Db	1874	GTACCGACTGGAGTCCATATGACAGCAAAAGCATCAAGTGGAGATGAAGCCTAAAAATCAG	1933

QY	1961	CTCTTGGAGATAAGACGATATGAATGGAACGACGAATGAAATGTACCTGTTCGGATCATCTG	2020
DB	1934	CTCTTGGAGATNAAGCATATGAATGGAACGACGAATGAAATGTACCTGTTCGGATCATCTG	1993
QY	2021	TTGCATATGCTATGAGGCGAGTACTTTTAAAGCTAAAGAAATCAGATGATCTTTTGGGG	2080
DB	1994	TTGCATATGCTATGAGGCGAGTACTTTTAAAGCTAAAGAAATCAGATGATCTTTTGGGG	2053
QY	2081	AGGAGGATGTCGAGTGGCTAATTTCAAACCAAGAAATCTCTTTAATTTCTTTGTCTCACTG	2140
DB	2054	AGGAGGATGTCGAGTGGCTAATTTCAAACCAAGAAATCTCTTTAATTTCTTTGTCTCACTG	2113
QY	2141	CACCTAAAAATGTGCTGATATCATCTTAGACTGAAGTTGAAAAGGCCATCAGGATGT	2200
DB	2114	CACCTAAAAATCTGCTGATATCATCTTAGACTGAAGTTGAAAAGGCCATCAGGATGT	2173
QY	2201	CCCGAGGCGTATCAATGATGCTTTCCGCTCTGAATGACACACGCCCTAGAGTTTCTGGGGA	2260
DB	2174	CCCGAGGCGGTATCAATGATGCTTTCCGCTCTGAATGACACACGCCCTAGAGTTTCTGGGGA	2233
QY	2261	TACAGCCACACTTGGACCTTCTTAACAGCCCTCTTTCCCATATGCTCATGTGTTTTT	2320
DB	2234	TACAGCCACACTTGGACCTTCTTAACAGCCCTCTTTCCCATATGCTCATGTGTTTTT	2293
QY	2321	GAGTTGTGATGGAGTGATAGTGGTTGGCATGTCTCATCTGATCTTCACCTGGGATCAGAG	2380
DB	2294	GAGTTGTGATGGAGTGATAGTGGTTGGCATGTCTCATCTGATCTTCACCTGGGATCAGAG	2353
QY	2381	ATCGGAAGAAGAAAAATAAAGCAAGAAGTGGAGAAAATCCTTATGCCTCCATCGATATTA	2440
DB	2354	ATCGGAAGAAGAAAAATAAAGCAAGAAGTGGAGAAAATCCTTATGCCTCCATCGATATTA	2413
QY	2441	GCAAGAGGAGAAAATAATACAGAGATCCAAACACACTGATGATGTTCAGACCTCCTTTTAGA	2500
DB	2414	GCAAGAGGAGAAAATAATACAGAGATCCAAACACACTGATGATGTTCAGACCTCCTTTTAGA	2473
QY	2501	AAAACTATGTTTTTCTCTCTCAGGSGATTTTCTGTATGTAAATGTAAATTTTCATGGTA	2560
DB	2474	AAAACTATGTTTTTCTCTCTCAGGSGATTTTCTGTATGTAAATGTAAATTTTCATGGTA	2533
QY	2561	TAGAAAAATAAGATGATAAAGATATCATTAATGTCAAAACATCATGCTGTTCAGAAA	2620
DB	2534	TAGAAAAATAAGATGATAAAGATATCATTAATGTCAAAACATCATGCTGTTCAGAAA	2593
QY	2621	AAAAA 2625	
DB	2594	AAAAA 2598	

RESULT 7	
AB046569	
LOCUS	2599 bp mRNA linear PRI 14-APR-2001
DEFINITION	AB046569 Homo sapiens ace2 mRNA, complete cds.
ACCESSION	AB046569
VERSION	AB046569.1 GI:13516971
KEYWORDS	.
SOURCE	Homo sapiens adult cDNA to mRNA, clone_lib:Sugano human cDNA library kaia clone:kaia4505.
ORGANISM	Homo sapiens
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
AUTHORS	1 (sites)
TITLE	Suzuki,Y., Watanabe,M. and Sugano,S. Cloning, expression analysis and chromosomal localization of a novel ACE like enzyme Unpublished
JOURNAL	2 (bases 1 to 2599)
REFERENCE	Komatsu,T., Suzuki,Y. and Sugano,S.
AUTHORS	Direct Submission
TITLE	Submitted (25-JUL-2000) Takami Komatsu, the Institute of Medical Science, Virology; 4-6-1, Minato-ku, Tokyo 108-8639, Japan
JOURNAL	(E-mail:komatsud@ims.u-tokyo.ac.jp, Tel.:81-3-5449-5283(ex.75283),

QY	1601	CTAATGATTACTCATTCATTCGATATTACACAAGGACCCCTTTACCAAAATCCAGTTTCAAG	1660
Db	1574	CTAATGATTACTCATTCATTCGATATTACACAAGGACCCCTTTACCAAAATCCAGTTTCAAG	1633
QY	1661	AGGCACTTTGTCACAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACT	1720
Db	1634	AGGCACTTTGTCACAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACT	1693
QY	1721	CTACAGAAGCTGGACAGAAGCTTTCAATATGCTGAGGCTTGAAAAATCAGAACCCCTGGA	1780
Db	1694	CTACAGAAGCTGGACAGAAGCTTTCAATATGCTGAGGCTTGAAAAATCAGAACCCCTGGA	1753
QY	1781	CCCTAGCAATGGAAATGTTGTAGGAGCAAGAACATGAATGTAAAGCCACTGCTCAACT	1840
Db	1754	CCCTAGCAATGGAAATGTTGTAGGAGCAAGAACATGAATGTAAAGCCACTGCTCAACT	1813
QY	1841	ACTTTGAGCCCTTATTTACTCGCTGAAGACAGACAGAAATCTCTTTGTGGGATGGA	1900
Db	1814	ACTTTGAGCCCTTATTTACTCGCTGAAGACAGACAGAAATCTCTTTGTGGGATGGA	1873
QY	1901	GTACCCAGCTGGAGTCCATATGCAGACCAAGCATCAAAAGTGAGGATAAGCCTAAAAATCAG	1960
Db	1874	GTACCCAGCTGGAGTCCATATGCAGACCAAGCATCAAAAGTGAGGATAAGCCTAAAAATCAG	1933
QY	1961	CTCTTTGGAGATAAGCATATGAATGGAAAGCACAATGAATGTACCTGTTCCGATCATCTG	2020
Db	1934	CTCTTTGGAGATAAGCATATGAATGGAAAGCACAATGAATGTACCTGTTCCGATCATCTG	1993
QY	2021	TTGCATATGCTATGAGGAGTACTTTTAAAGTAAAAATCAGATGATCTCTTTTGGGG	2080
Db	1994	TTGCATATGCTATGAGGAGTACTTTTAAAGTAAAAATCAGATGATCTCTTTTGGGG	2053
QY	2081	AGGAGGATGTCGAGTGGCTTAATTTGAAACCAAGAACTCTCTTTAAATTTCTTTGTCACTG	2140
Db	2054	AGGAGGATGTCGAGTGGCTTAATTTGAAACCAAGAACTCTCTTTAAATTTCTTTGTCACTG	2113
QY	2141	CACCTAAAAATGCTCTGATATCATCTAGAACTGAAGTTGAAAGGCCATCAGGATGT	2200
Db	2114	CACCTAAAAATGCTCTGATATCATCTAGAACTGAAGTTGAAAGGCCATCAGGATGT	2173
QY	2201	CCGCGAGCCGTATCAATGATGCTTCCGCTGTAATGACACAGACCTTAGAGTTTCTGGGGA	2260
Db	2174	CCGCGAGCCGTATCAATGATGCTTCCGCTGTAATGACACAGACCTTAGAGTTTCTGGGGA	2233
QY	2261	TACAGCAACACCTGGACCTCCCTAACACAGCCCTGTTTCCATATGGCTGATGTTTGTG	2320
Db	2234	TACAGCAACACCTGGACCTCCCTAACACAGCCCTGTTTCCATATGGCTGATGTTTGTG	2293
QY	2321	GAGTTGTGATGGGAGTGATAGTGGCTTGGCAATGTATCCTGATCTTCACTGGGATCAGAG	2380
Db	2294	GAGTTGTGATGGGAGTGATAGTGGCTTGGCAATGTATCCTGATCTTCACTGGGATCAGAG	2353
QY	2381	ATCGGAAGAGAAAAATAAGCAAGAGTGGAGAAAATCCCTTATGCCCTCCATCGATATTA	2440
Db	2354	ATCGGAAGAGAAAAATAAGCAAGAGTGGAGAAAATCCCTTATGCCCTCCATCGATATTA	2413
QY	2441	GCAAGGAGAAAAATAATCCAGGATTCCAAAACACTGATGATGTTTCCAGACCTCTTTTAGA	2500
Db	2414	GCAAGGAGAAAAATAATCCAGGATTCCAAAACACTGATGATGTTTCCAGACCTCTTTTAGA	2473
QY	2501	AAAATCTATGTTTCTCTTGGAGTGATTTTGTGATGTAAATGTTAAATTCATGGTA	2560
Db	2474	AAAATCTATGTTTCTCTTGGAGTGATTTTGTGATGTAAATGTTAAATTCATGGTA	2533
QY	2561	TAGAAAAATATAGATGATAAGATATCAATTAAGTCAAAACTATGACCTCTCTTCAGAAA	2620
Db	2534	TAGAAAAATATAGATGATAAGATATCAATTAAGTCAAAACTATGACCTCTCTTCAGAAA	2593
QY	2621	AAAAA 2625	
Db	2594	AAAAA 2598	

RESULT 8					
E39033	LOCUS	2418 bp	DNA	linear	PAT 07-FEB-2001
E39033	DEFINITION	MPROT15 polypeptide and MPROT15 polynucleotide.			
E39033	ACCESSION	E39033			
E39033.1	GI:13017695				
JP 1999318472-A/1.	VERSION				
Homo sapiens.	KEYWORDS				
Homo sapiens	SOURCE				
Homo sapiens	ORGANISM				
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.					
1 (bases 1 to 2418)	REFERENCE				
Christopher, D.S.N.N.	AUTHORS				
MPROT15 polypeptide and MPROT15 polynucleotide	TITLE				
Patent: JP 1999318472-A 1 24-NOV-1999;	JOURNAL				
SMITHKLINE BEECHAM CORP PUBLIC LTD CO					
OS Homo sapiens (human)	COMMENT				
PN JP 1999318472-A/1					
PD 24-NOV-1999					
PF 22-JAN-1999 JP 1999014949					
PR 13-MAY-1998 GB 9810373:2,18-AUG-1998 GB 9818009:4 PI					
CHRISTOPHER D SAZAN, NICOLA BAGESU					
C12N15/09, A61K31/00, A61K31/00, A61K31/00, A61K31/70,					
PC A61K38/00,					
PC A61K39/395, A61K45/00, A61K48/00, C07K14/47, C12P21/02, C12Q1/68,					
PC G01N33/15,					
PC G01N33/50, G01N33/50, G01N33/566, G01N33/68/(C12P21/02,					
C12R1:91), PC C12N15/00,					
PC A61K37/02					
CC	Key	Location/Qualifiers			
FT	source	1..2418			
FT		/organism="Homo sapiens (human)"			
FEATURES	source	Location/Qualifiers			
		1..2418			
		/organism="Homo sapiens"			
		/db_xref="taxon:9606"			
BASE COUNT	744 a 484 c 555 g 635 t				
ORIGIN					
	Query Match	71.2%; Score 2416.4; DB 6; Length 2418;			
	Best Local Similarity	100.0%; Pred. No. 0;			
	Matches 2417; Conservative	0; Mismatches 1; Indels 0; Gaps 0;			
QY	82	ATGTCAAGCTCTTCTGGCTCCTTCTCAGCCCTTGTGTAACTGCTGCTCAGTCCACC	141		
Db	1	ATGTCAAGCTCTTCTGGCTCCTTCTCAGCCCTTGTGTAACTGCTGCTCAGTCCACC	60		
QY	142	ATTGAGAACAGGCCAAGACATTTTGGCAAGTTTAAACCAGAACCCGAGACCTGTTC	201		
Db	61	ATTGAGAACAGGCCAAGACATTTTGGCAAGTTTAAACCAGAACCCGAGACCTGTTC	120		
QY	202	TATCAAACTTCAGTTCCTTCTTGGAAATATAACACCAATATTACTGAAGAGATGTCCAA	261		
Db	121	TATCAAAAGTTCACTTCTTCTTGGAAATATAACACCAATATTACTGAAGAGATGTCCAA	180		
QY	262	AACATGAATTAATGCTGGGACAAATGGTCTGCTTTTAAAGAACAGTCCACACTTGCC	321		
Db	181	AACATGAATTAATGCTGGGACAAATGGTCTGCTTTTAAAGAACAGTCCACACTTGCC	240		
QY	322	CAAAATGTATCCACTACAGAAATTCAGAAATCTCAGCTCAGCTCAGCTCAGCTCTT	381		
Db	241	CAAAATGTATCCACTACAGAAATTCAGAAATCTCAGCTCAGCTCAGCTCAGCTCTT	300		
QY	382	CAGCAAAATGGGCTTTCAGTCTCAGAAAGACAGCAAGCAACCGTTTGAACAAATCTA	441		
Db	301	CAGCAAAATGGGCTTTCAGTCTCAGAAAGACAGCAAGCAACCGTTTGAACAAATCTA	360		
QY	442	AATACAAATGAGCACCATTCTACAGTACTGGAAAAGTTTGAACCCAGATATCCACAGAA	501		
Db	361	AATACAAATGAGCACCATTCTACAGTACTGGAAAAGTTTGAACCCAGATATCCACAGAA	420		
QY	502	TGCTTATTACTTGAACACCGGTTTGAATGAATATAATGGCAACAGTTTAGACTACATGAG	561		

REFERENCE	1 (bases 1 to 2415)
AUTHORS	Acton, S. Laurene and Robison, K. Earl.
TITLE	Angiotensin converting enzyme homology and therapeutic and diagnostic uses therefor
JOURNAL	Patent: US 6194556-A 3 27-FEB-2001;
FEATURES	Location/Qualifiers
source	1..2415
BASE COUNT	743 a 483 c 555 g 634 t
ORIGIN	
Query Match	71.1%; Score 2415; DB 6; Length 2415;
Best Local Similarity	100.0%; Pred. No. 0;
Matches 2415; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
QY	82 ATGTCAGGCTCTTCCTGGCTCTCTCAGGCTTGTGCTCTAAGTCTGTGCTCAGTCCACC 141
Db	1 ATGTCAGGCTCTTCCTGGCTCTCTCAGGCTTGTGCTCTAAGTCTGTGCTCAGTCCACC 60
QY	142 ATGAGGACAGCCGCAAGACATTTTGGACAAGTTTAAACCAAGCCGAGACCTGTTC 201
Db	61 ATTGAGGAACGGCCGAAGACATTTTGGACAAGTTTAAACCAAGCCGAGACCTGTTC 120
QY	202 TATCAAAAGTCACTTCTCTCTGGAATATAACACCAATATTACTGAAGAAATGTCAA 261
Db	121 TATCAAAAGTCACTTCTCTCTGGAATATAACACCAATATTACTGAAGAAATGTCAA 180
QY	262 AACATGAATATGCTGGGACAAATGGTCTGCCTTTTAAAGGAACAGTCCACACTTGCC 321
Db	181 AACATGAATATGCTGGGACAAATGGTCTGCCTTTTAAAGGAACAGTCCACACTTGCC 240
QY	322 CAATGTATCCACTACAAGAAATTCAGATCTCACAGTCAAGCTTTCAGCTGCGAGCTTT 381
Db	241 CAATGTATCCACTACAAGAAATTCAGATCTCACAGTCAAGCTTTCAGCTGCGAGCTTT 300
QY	382 CAGCAAAATGGGTCTTCAGTGTCTCAGAGACAAAGCAAGCGTTGAAACAAATTCCTA 441
Db	301 CAGCAAAATGGGTCTTCAGTGTCTCAGAGACAAAGCAAGCGTTGAAACAAATTCCTA 360
QY	442 AATACAATGAGCACCACTCTACAGTACTGGAAGATTTGTAACCCAGATAATCCACAGAA 501
Db	361 AATACAATGAGCACCACTCTACAGTACTGGAAGATTTGTAACCCAGATAATCCACAGAA 420
QY	502 TGCTTATTACTTGAACCAAGTCTTGAATGAATGAATGAATGAATGAATGAATGAATGA 561
Db	421 TGCTTATTACTTGAACCAAGTCTTGAATGAATGAATGAATGAATGAATGAATGAATGA 480
QY	562 AGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGGTGGCAAGCAGCTGAGGCCATTATAT 621
Db	481 AGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGGTGGCAAGCAGCTGAGGCCATTATAT 540
QY	622 GAAGAGTATGGTCTTGAAGATAGATGGCAAGACCAATCATTTATGAGGACTATGG 681
Db	541 GAAGAGTATGGTCTTGAAGATAGATGGCAAGACCAATCATTTATGAGGACTATGG 600
QY	682 GATTATTGAGAGGAGACTATGAAGTAAATGGGATGAGTGGCTATGAGTACAGCCGGC 741
Db	601 GATTATTGAGAGGAGACTATGAAGTAAATGGGATGAGTGGCTATGAGTACAGCCGGC 660
QY	742 CAGTTGATTGAAGATGGAACATACCTTTGAAGAGATTAAACCATTTATGAACTCTT 801
Db	661 CAGTTGATTGAAGATGGAACATACCTTTGAAGAGATTAAACCATTTATGAACTCTT 720
QY	802 CATGCCATGTCAGGCCAAAGTTGATGAATGCCATCTCCCTATATCATGTCGAATGGA 861
Db	721 CATGCCATGTCAGGCCAAAGTTGATGAATGCCATCTCCCTATATCATGTCGAATGGA 780
QY	862 TGCCCTCCCTGCTCATTTGCTGTGATATGTGGGTAGATTTTGGACAAATCTGTACTCT 921
Db	781 TGCCCTCCCTGCTCATTTGCTGTGATATGTGGGTAGATTTTGGACAAATCTGTACTCT 840
QY	922 TTGACAGTTCCCTTTGGACAGAAACAAATAGATGTTTACTGATGCAATGGTGGACCAG 981

Db	841 TTGACAGTTCCCTTTGGACAGAAACCAACATAGATGTTTACTGATGCAATGGTGGCCAG 900
QY	982 GCCTGGGATGCACAGAGAATATTCAAGGAGGCCGAGAAAGTCTTTTGTATCTGTGGTCTT 1041
Db	901 GCCTGGGATGCACAGAGAATATTCAAGGAGGCCGAGAAAGTCTTTTGTATCTGTGGTCTT 960
QY	1042 CCTAATATGACTCAAGGATTTCTGGGAAAATTCATGCTTAACGACCCAGGAAATGTTTCAG 1101
Db	961 CCTAATATGACTCAAGGATTTCTGGGAAAATTCATGCTTAACGACCCAGGAAATGTTTCAG 1020
QY	1102 AAAGCAGTCTGCCATCCACAGCTTGGGACCTTGGGAAGGCGGACTTTCAGGATCCTTATG 1161
Db	1021 AAAGCAGTCTGCCATCCACAGCTTGGGACCTTGGGAAGGCGGACTTTCAGGATCCTTATG 1080
QY	1162 TGCACAAAGGTGACAAATGGACGACTTCTCTGACAGCTCATCATGAGATGGGCGATATCCAG 1221
Db	1081 TGCACAAAGGTGACAAATGGACGACTTCTCTGACAGCTCATCATGAGATGGGCGATATCCAG 1140
QY	1222 TATGATATGGCATATGCTGCAACAACCTTTTCTGCTAAGAAATGGAGCTAATGAAGATTTC 1281
Db	1141 TATGATATGGCATATGCTGCAACAACCTTTTCTGCTAAGAAATGGAGCTAATGAAGATTTC 1200
QY	1282 CATGAAGCTGTTGGGAAAATCATGTCACCTTTCTGCAAGCCACACTAAGCATTTAAAATCC 1341
Db	1201 CATGAAGCTGTTGGGAAAATCATGTCACCTTTCTGCAAGCCACACTAAGCATTTAAAATCC 1260
QY	1342 ATTGCTCTTCTGTCACCCGATTTTCAAGAGACAATGAACAGAAATATAACTTCTCTGCTC 1401
Db	1261 ATTGCTCTTCTGTCACCCGATTTTCAAGAGACAATGAACAGAAATATAACTTCTCTGCTC 1320
QY	1402 AAACAGACACTCAGATTTGTTGGGACTCTGCCATTTACTTACATGTTAGAGAAGTGGAGG 1461
Db	1321 AAACAGACACTCAGATTTGTTGGGACTCTGCCATTTACTTACATGTTAGAGAAGTGGAGG 1380
QY	1462 TGGATGCTCTTAAAGGGGAAATTCCTCAAGACAGCTGGATGAAAAGTGGTGGGAGATG 1521
Db	1381 TGGATGCTCTTAAAGGGGAAATTCCTCAAGACAGCTGGATGAAAAGTGGTGGGAGATG 1440
QY	1522 AAGCAGAGATATGTTGGGTGGTGGAACTGTGCCCATGATGAAACATATCTGTGACCCC 1581
Db	1441 AAGCAGAGATATGTTGGGTGGTGGAACTGTGCCCATGATGAAACATATCTGTGACCCC 1500
QY	1582 GCATCTCTCTCCATGTTCTTATGATTAATCTCATTTGATGATTAATCTCATTTGATGAT 1641
Db	1501 GCATCTCTCTCCATGTTCTTATGATTAATCTCATTTGATGATTAATCTCATTTGATGAT 1560
QY	1642 TACCAATTCACGTTTCAAGAGCAGCTTGTGCAAGCAGCTTAAACATGAAGGCCCTCTGCAC 1701
Db	1561 TACCAATTCACGTTTCAAGAGCAGCTTGTGCAAGCAGCTTAAACATGAAGGCCCTCTGCAC 1620
QY	1702 AATGTGACATCTCAAACTCTACAGAGCTGGACAGAACTGTTCAATATGCTGAGGCTT 1761
Db	1621 AATGTGACATCTCAAACTCTACAGAGCTGGACAGAACTGTTCAATATGCTGAGGCTT 1680
QY	1762 GAAAAATCAGAACTCTGAGCCCTTAGCATTTGGAATAATGTTGTAGSAGCAAGAACATCAAT 1821
Db	1681 GAAAAATCAGAACTCTGAGCCCTTAGCATTTGGAATAATGTTGTAGSAGCAAGAACATCAAT 1740
QY	1822 GTAGGCCACTCTCAACTACTTTTGAGCCCTTATTTACCTGGCTGAAAGACCAAGAACAG 1881
Db	1741 GTAGGCCACTCTCAACTACTTTTGAGCCCTTATTTACCTGGCTGAAAGACCAAGAACAG 1800
QY	1882 AATTTCTTTTGGGATGGAGTACCCGACTGGAGTCCATATGTCAGACCAACCAATCAAAATG 1941
Db	1801 AATTTCTTTTGGGATGGAGTACCCGACTGGAGTCCATATGTCAGACCAACCAATCAAAATG 1860
QY	1942 AGGATAAGCCTAAAATCAGCTCTTGGAGATAAAGCATATGAATGGAGCAACAATGAAT 2001
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QY	2062	CAGATGATCTCTTTTGGGAGGAGATGTCGGAGTGGCTAATTTGAAACCAAGATCTCC	2121
Db	1981		
QY	2122	TTTAATTTCTTTGTCACCTGACCTAAATAATGTCTGATATCATTTCCCTAGAACTGAAGTT	2181
Db	2041		
QY	2182	GAAAGGCCATCAGAGATGTCGGAGCGGTATCAATGATGCTTCGCTGTAATGACAAC	2241
Db	2101		
QY	2242	AGCCTAGAGTTCTCGGGATACAGCAACACTTGGACCTCCCTAAACCAGCCCTGTTCC	2301
Db	2161		
QY	2302	ATATGGCTGATGTTTGGAGTTGTGATGGAGTGATAGTGGTGGCATTTGTCATCCCTG	2361
Db	2221		
QY	2362	ATCTTCACTGGATCAGAGATCGGAAGAGAAAAATTAAGCAAGAGTGGAGAAAAATCCT	2421
Db	2281		
QY	2422	TATGCCCTCCATCGATATTAGCAAAAGGAGAAAAATATCCAGGATTCCAAAACACTGATGAT	2481
Db	2341		
QY	2482	GTTTCAGACCTCTTTT 2496	
Db	2401		
RESULT 10			
E43987			
LOCUS	E43987	2415 bp	DNA linear PAT 31-JAN-2002
DEFINITION	ACE-analogous gene.		
ACCESSION	E43987		
VERSION	E43987.1 GI:18629190		
KEYWORDS	JP 2001046072-A/1.		
SOURCE	unidentified.		
ORGANISM	unclassified.		
REFERENCE	1 (bases 1 to 2415)		
AUTHORS	Sugano,S. and Komatsu,T.		
TITLE	ACE-analogous gene		
JOURNAL	Patent: JP 2001046072-A 1 20-FEB-2001;		
COMMENT	OTSUKA PHARMACEUT CO LTD		
	OS Unknown		
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	PD 20-FEB-2001		
	PF 06-AUG-1999 JP 1999223892		
	PR		
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	PC C12N15/09,A61K31/00,A61K31/7088,A61K38/00,A61K38/55,		
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	PC A61K39/395,A61K48/00,A61P9/12,C07K14/47,C07K16/08,C12N1/15, PC		
	C12N1/19,		
	PC C12N1/21,C12N5/10,C12Q1/68,G01N33/53,C12N15/00,A61K37/02, PC		
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	PC C12N5/00		
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BASE COUNT	743 a	484 c	554 g 634 t
ORIGIN			

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Best Local Similarity		100.0%; Pred. No. 0;	
Matches 2414; Conservative		0; Mismatches 1; Indels 0; Gaps 0;	
QY	82	ATGTCAAAGCTCTTCTCGCTCCTCTCTCAGCCCTTGTTGCTGTAACTGCTGCTCAGTCCACC	141
DB	1	ATGTCAAAGCTCTTCTCGCTCCTCTCTCAGCCCTTGTTGCTGTAACTGCTGCTCAGTCCACC	60
QY	142	ATTGAGGAACAGGCCAAGACATTTTGGACAAAGTTTAAACCAGAACCCGAAGACCTGTTC	201
DB	61	ATTGAGGAACAGGCCAAGACATTTTGGACAAAGTTTAAACCAGAACCCGAAGACCTGTTC	120
QY	202	TATCAAAAGTTTCACTTGTCTTGGAAATTAACACCAATATTACTGAAGAGAAATGTCCAA	261
DB	121	TATCAAAAGTTTCACTTGTCTTGGAAATTAACACCAATATTACTGAAGAGAAATGTCCAA	180
QY	262	AACATGAATATGCTGGGACAAATGGTCTGCCTTTTAAAGGAACAGTCCACACTTGCC	321
DB	181	AACATGAATATGCTGGGACAAATGGTCTGCCTTTTAAAGGAACAGTCCACACTTGCC	240
QY	322	CAAAATGTATCCACTACAAGAAATTCAGAATCTCAGAGTCAAGCTTCAGCTGCAGGCTCTT	381
DB	241	CAAAATGTATCCACTACAAGAAATTCAGAATCTCAGAGTCAAGCTTCAGCTGCAGGCTCTT	300
QY	382	CAGCAAAATGGGTCTTTCAGTCTGCTCAGAAGACAAGACAAACGGTTGAACACAATCTA	441
DB	301	CAGCAAAATGGGTCTTTCAGTCTGCTCAGAAGACAAGACAAACGGTTGAACACAATCTA	360
QY	442	AATACAATGAGCACCATCTACAGTACTGCAAAAGTTTGTAAACCCAGATATTCACACAGAA	501
DB	361	AATACAATGAGCACCATCTACAGTACTGCAAAAGTTTGTAAACCCAGATATTCACACAGAA	420
QY	502	TGCTTATTTACTTGAAACCAGTTTGAATGAATAATGGCCAAACAGTTTAGACTACAATGAG	561
DB	421	TGCTTATTTACTTGAAACCAGTTTGAATGAATAATGGCCAAACAGTTTAGACTACAATGAG	480
QY	562	AGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGGTGCGCAAGCAGCTGAGGCCATTATAT	621
DB	481	AGGCTCTGGGCTTGGGAAAGCTGGAGATCTGAGGTGCGCAAGCAGCTGAGGCCATTATAT	540
QY	622	GAAGAGTATGTGCTTGTGAAATAGATGGCAAGAGCAAAATCATTTATGAGGACTATGGG	681
DB	541	GAAGAGTATGTGCTTGTGAAATAGATGGCAAGAGCAAAATCATTTATGAGGACTATGGG	600
QY	682	GATTATTGGAGAGGAGACTATGAAGTAAATGGGGTAGATGGCTATGACTACAGCCGCGGC	741
DB	601	GATTATTGGAGAGGAGACTATGAAGTAAATGGGGTAGATGGCTATGACTACAGCCGCGGC	660
QY	742	CAGTTGATTGAAGATGTGGAACATACCTTTTGAAGAGATTAAACCATTTATATGAACATCTT	801
DB	661	CAGTTGATTGAAGATGTGGAACATACCTTTTGAAGAGATTAAACCATTTATATGAACATCTT	720
QY	802	CATGCCCTATGTGAGGGCAAGTTGATGAATGCCTATCCTTCTTATATCATGTCCTCAATGGA	861
DB	721	CATGCCCTATGTGAGGGCAAGTTGATGAATGCCTATCCTTCTTATATCATGTCCTCAATGGA	780
QY	862	TGCCCTCCCTGCTCATTTGCTTGGTATATGTGGGGTAGATTTTGGACAAATCTGTACTCT	921
DB	781	TGCCCTCCCTGCTCATTTGCTTGGTATATGTGGGGTAGATTTTGGACAAATCTGTACTCT	840
QY	922	TTGACAGTTCCTTTTGGACAGAAACCAACATAGATGTTTACTGATGCAATGGTGGACAG	981
DB	841	TTGACAGTTCCTTTTGGACAGAAACCAACATAGATGTTTACTGATGCAATGGTGGACAG	900
QY	982	GCCTGGGATGCACAGAGAAATATTCAGGAGGGCGGAGAAAGTTCTTTGTATCTGTGGTCTT	1041
DB	901	GCCTGGGATGCACAGAGAAATATTCAGGAGGGCGGAGAAAGTTCTTTGTATCTGTGGTCTT	960
QY	1042	CCTAATATGACTCAAGGATTTCTGGGAAATTCATGCTTAACGGACCCAGGAAATGTTTCAG	1101
DB	961	CCTAATATGACTCAAGGATTTCTGGGAAATTCATGCTTAACGGACCCAGGAAATGTTTCAG	1020
QY	1102	AAAGCAGTCTGCCATCCCAACAGCTTTGGGACCTTGGGAGGGCGGACTTTCAGGATCCTTATG	1161

Db	2101	GAAGAGCCATCAGGAA'GTCCCAGGACCGTA'CAATGATGCTTTCGGTGTGAATGACAAC	2160
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Db	2161	AGCCTAGACTTTCTGGGGATACAGCCAACACTTGGACCTCTCTAACACAGCCCTGTGTTCC	2220
Qy	2302	ATATGGCTCATGTTTMTTGGAGTTTGTCATGGAGTAGTAGTGGTGGCATTTGTCACTCCTG	2361
Db	2221	ATATGGCTCATGTTTMTTGGAGTTTGTCATGGAGTAGTAGTGGTGGCATTTGTCACTCCTG	2280
Qy	2362	ATCTTCAGTGGGATCAGAGATCGGAAGAAGAAAAATAAAGACNAGAGTGGAGAAAATCCT	2421
Db	2281	ATCTTCAGTGGGATCAGAGATCGGAAGAAGAAAAATAAAGACNAGAGTGGAGAAAATCCT	2340
Qy	2422	TATGGCTCCATCGATTATACCAAGGAGAAAAATATCCAGGATTCACAAACACTGATGAT	2481
Db	2341	TATGGCTCCATCGATTATACCAAGGAGAAAAATATCCAGGATTCACAAACACTGATGAT	2400
Qy	2482	GTTCCAGACCTCCTTT	2496
Db	2401	GTTCCAGACCTCCTTT	2415
RESULT 11	E39034	2262 bp DNA linear PAT 07-FEB-2001	
LOCUS	MPROT15 polypeptide and MPROT15 polynucleotide.		
DEFINITION	E39034		
ACCESSION	E39034		
VERSION	E39034.1 GI:J3017696		
KEYWORDS	JP 1999318472-A/2.		
SOURCE	Homo sapiens.		
ORGANISM	Homo sapiens		
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
AUTHORS	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
TITLE	1 (bases 1 to 2262)		
JOURNAL	Christopher, D.S.N.N.		
COMMENT	MPROT15 polypeptide and MPROT15 polynucleotide Patent: JP 1999318472-A 2 24-NOV-1999; SMITHKLINE BEECHAM CORP PUBLIC LTD CO OS Homo sapiens (human) PN JP 1999318472-A/2 PD 24-NOV-1999 PF 22-JAN-1999 JP 1999014949 PR 13-MAY-1998 GB 9810373;2,18-AUG-1998 GB 9818009;4 PI CHRISTOPHER D SAVAN,NICOLA BAGESU PC C12N15/09,A61K31/00,A61K31/00,A61K31/00,A61K31/00,A61K31/70, PC A61K38/00, PC A61K39/395,A61K45/00,A61K48/00,C07K14/47,C12P21/02,C12Q1/68, PC G01N33/50,G01N33/566,G01N33/68/(C12P21/02, C12R1/91) PC C12N15/00, PC A61K37/02 CC FH Key Location/Qualifiers FT source 1..2262 /organism='Homo sapiens (human)'. FT location/Qualifiers 1..2262 /organism='Homo sapiens' /db_xref='taxon:9606'		
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Best Local Similarity	90.5%; Pred. No. 0;		
Matches 2164;	Conservative 0; Mismatches 38; Indels 189; Gaps 3;		
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Db	61	ATCCTTGTCGTAACTGCTGCTCAGTCACCACCTGAGGAAACAGGCCAAGACATTTTGG	120
Qy	169	GACAAAGTTTAAACCAAGGCCGAAGACCTTCTTATCAAAGTTTCACTGCTCTTGGAAAT	228

Db 121 GACAAGTTTAAACACGAGCCGAGACCTGTCTATCAAGTTCACTTGTCTTTGGAAT 180
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Db 181 TATAACACCAATATTACTGAAGAGAAATGTCCAAAACATGAATATGCTGGGACAAATGG 240
QY 289 TCTGCTTTTAAAGGAAACAGTCCACACTGCCCAATGTATCCACTACAGAATAATTCAG 348
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QY 349 AATCTCAGTCAAGCTTCAGCTGAGGCTCTTTCAGCAAAATGGTCTTCAGTCTGTCA 408
Db 301 AATCTCAGTCAAGCTTCAGCTGAGGCTCTTTCAGCAAAATGGTCTTCAGTCTGTCA 360
QY 409 GAACACAGACCAAGCGTTGAACACAAATCTAAATACAAATGAGCACCCTCTACAGTACT 468
Db 361 GAAGACAGAGCAACAGCTTGAACACAAATCTAAATACAAATGAGCACCCTCTACAGTACT 420
QY 469 GGAAGAAGTTTGAACCCAGATAATCCACAGAAATGCTTATCTTGAACAGGTTTGAAT 528
Db 421 GGAAGAAGTTTGAACCCAGATAATCCACAGAAATGCTTATCTTGAACAGGTTTGAAT 480
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QY 2089 GTGCAGTGGCTAAATTTGAACCAAGAAATCTCTTTTAAATTTCTTTGTCACCTGACCTAAA 2148
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Db 2212 GAAATAATCCAGGATCCAAAACACATGATGATGTTCCAGACCTCCTTTTAG 2262
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RESULT 12
AX047762 2638 bp DNA linear PAT 15-DEC-2000
DEFINITION Sequence 5 from Patent WO0070032.
ACCESSION AX047762
VERSION AX047762.1 GI:11876768
KEYWORDS
SOURCE Mus sp.
ORGANISM Mus sp.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 2638)
AUTHORS Piddington,C.S., Petrie,C.R., Shoemaker,K.E. and Bishop,P.D.
Zace2: a human metalloenzyme
TITLE Patent: WO 0070032-A.5 23-NOV-2000;
JOURNAL Zymogenetics, Inc. (US)
FEATURES
source Location/Qualifiers
1..2638
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BASE COUNT 801 a 557 c 611 g 669 t
ORIGIN

Query Match 55.7%; Score 1890.2; DB 6; Length 2638;
Best Local Similarity 84.1%; Pred. No. 0;
Matches 2162; Conservative 0; Mismatches 393; Indels 16; Gaps 2;

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QY	531	AATAATGGCAAAACAGTTTAGACTACAATGAGAGGCTCTGGGCTTGGGAAGCTTGGAGATC	590
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QY	651	GCCACAGCAAAATCATTTATCAGGACTATGGGATTTATTGGAGAGGAGACTATGAAGTAAA	710
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1551	QY	1551	TGTGCCCCATGATGAACACATACCTGTGAGCCCCGATCTCTGTTCCTATGTTTCTTAATGATT	1610
1575	DB	1575	TCTGCCCTCGTATGAACACATACCTGTGAGCCCCGATCTCTGTTCCTATGTTTCTTAATGATT	1634
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1635	DB	1635	CTCATTTCAATTCGATTTATACACAAGGACCTTTACCAATTTCCAGTTTCAAGAAGCACTTTG	1694
1671	QY	1671	TCAAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTTACAGAAGC	1730
1695	DB	1695	TCAAGCAGCTAAATGATTAATGGTTCTCTGSCAAATGTGACATCTCAAAATTTCCACTGAAGC	1754
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1755	DB	1755	TGGCAGAAATGTTCTCAAGATGCTGAGTCTTGGAAATTCAGAGCCCTGGACCCGAAGCCTTT	1814
1791	QY	1791	GGAAATGTTGTAAGAGCAAGACATGAATGTAAGGCCACTGCTTCAACTACTTTTGAGCC	1850
1815	DB	1815	GGAAATGTTGTAAGAGCAAGACATGAATGTAAGGCCACTGCTTCAACTACTTTTGAGCC	1874
1851	QY	1851	CTTATTTACCTGGCTGAAAGACCAAGAAAGAAATTTCTTTTGGGATGGAGTACCGACTG	1910
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1911	QY	1911	GAGTCCATATCGACAGCAACAGCATCAAAGTGAAGTAAAGCCTTAAATTCAGCTCTTGAGGA	1970
1935	DB	1935	GAGCCATATGCGGACCAACAGCATTAAGTGAAGTAAAGCCTTAAATTCAGCTCTTGAGGA	1994
1971	QY	1971	TAAAGCATATGAATGGAAACGCAATGAAATGTAAGTTCAGCTCTTGAGGATCATCTGTCATATGC	2030
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2331	QY	2331	GGGAGTGAATAGTGGTGGCAATTTGTCATCTGTATCTTCACTGGGATCAGAGATCGGAGAA	2390
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2415	DB	2415	GAATAATAAGCAAGAGAGAGAACCTTTATGACTCGATGACATTTGGAAGGAGAGA	2474
2451	QY	2451	AAATATCCAGGATTCCTCAAAACACTGATGATGTTTACAGACCTCTTTTATGAAAAATCTATG	2510

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AUTHORS Zace2: a human metalloenzyme			
TITLE Patent: WO 0070032-A 3 23-NOV-2000;			
JOURNAL zymoGenetics, Inc. (US)			
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Dd	1	ATGWSNWSNSWNSNTGGYNYTWYNWSNYNGTNCNGTNACNCGNCARWSNACN	60
QY	142	ATTGAGAACAGGCCAAGACATTTTGGACAAGTTTAACACGAGCCGGAAGACCTGTC	201
Dd	61	ATHGARCARCARGCNARACNTTYTNGAYAAARTYAAYCAYGARCGNGARGAYYNTTY	120
QY	202	TATCAAGTTCACCTTCTCTTGAATTAACACCAATATTTACTGCAAGAGATGTCCAA	261
Dd	121	TAYCARWSNSNTNGCNWSNTGGAATYAAAYACNAAYATHACNGARGARAAYGNAR	180
QY	262	RACATGAATAATCTCGGGGCAAAATGGTCTGCCTTTTAAAGGACACGACCTTGCC	321
Dd	181	AYATGAAYXAYGCMGNGAYATRTGWSNGCNTYYTYNARGARCARNSNACNTNGCN	240
QY	322	CAATGTATCCACTACAAGAAATTCAGAAATCTCACAGTCAAGCTTCAGCTGCAGGCTCT	381

Db 241 CARATGAYCCNYTCARGARATHCARAAAYTNACNGTNAARTNCARYTNCARGCNYTN 300
QY 382 CAGCAAAATGGCTCTCACTGCTGTCAGAGCAAGCAAGCAAGGTTGAACACAATCTTA 441
Db 301 CARCARAAYGGNWSNNGTNTYNSNGARGAYAAWWSNAARMGNTNAAAYACNATHYTN 360
QY 442 AATCAATGAGCACCATCTACAGTACTGGAAGAGTTGTAACCCAGATATCCACAAGAA 501
Db 361 AAYACNATGWSNACNATHAYWSNACNGNNAARGTNTGYAAYCCNGAAYAAAYCCNARGAR 420
QY 502 TGCTTATPACTTGAACACAGTTGTAATGAAATAATGCAACACAGTTTAGACTACAATGAG 561
Db 421 TGYTNTYNTYNGARCCNGNTNAAAGARATHATGGCNAAYWSNTNGAYTAAYAGAR 480
QY 562 AGGCTCTGGGCTTGGAAAGCTGGAGATCTGAGGTGGCAAGCAGCTGAGCCCATATAT 621
Db 481 MGNNTNTGGCCTGGARWSNTGGNWSNGARGTNGNNAARCARVTNMGNCNCTYTAY 540
QY 622 GNACAGTATGCTGCTTGAANAATGAGATGGCAAGAGCAAAATCATTATGAGGACTATGGG 681
Db 541 GARGARTAYGTGNTYNTAARAAYGARATGGCNGMNGCNAAYCAYTAYGARGAYTAYGN 600
QY 682 GATPATTTGGAGGAGACTATGAAGTAAATGGGTAGGTAGCTATGACTACACCCGGCG 741
Db 601 GAYTAYTGGMNGNGAYTAYGARTNAYGNGTNGAYGGNTAYGAYTAIWSNMNGN 660
QY 742 CAGTGTATGAGATGGCAATACCTTTGAAGAGATTAAACCAATTATGAGACTCTT 801
Db 661 CARVTNATHGARGAYTGNCAYACNTTYGARGARATHAARCCNTNTAYGARCAYITN 720
QY 802 CATGCCATGTGAGGGCAAGTTGATGAATGCCATATCCCTTCTATATCATGCTCAATTTGA 861
Db 721 CAYGCNTAYGTNMGNCNAARTNATGAAYGCNTAYCCNWSNTAYTHSNCCNATHGN 780
QY 862 TGCTCCCTGCTCATTTGCTGCTATGATGCGGTAGATTTTGGCAAAATCTGTACTCT 921
Db 781 TGYTNCNCNCAYITNTYMGNGAYATGTTGGGNGMNTTYTGGACNAAYTNTAYWSN 840
QY 922 TTGACAGTTCCTTTGGAGAGAAACCAACATAGATGTTACTGATGCTCAATGTTGGGACG 981
Db 841 YTNACNTNCCNTYTGNCARARCCNAAAYATHGAYTNACNGAYGCNATGGTNGAYCAR 900
QY 982 GCTTGGATGCAGAGAAATATCAAGGAGCCGAGAAGTTCTTGTATCTGTTGGTCTT 1041
Db 901 GCNTGGAYGCNCARMGNATHTTVAARGCNGARGAARTTYTGTNWSNGTNGNYTN 960
QY 1042 CCTAATATGACTCAAGATCTTGGAAATTCCTGCTTAACGAGCCAGCAATGTTCCAG 1101
Db 961 CCNAAATGACNCARGGNTTYTGGGARAAYWSNATGYTNACNGAYCCNGNAAAYGTNCAR 1020
QY 1102 AAAGCAGTCTGCCATCCACAGCTTGGACCTGGGAGGGGAGCTTCAGGATCCTTATG 1161
Db 1021 AARGCNGTNGYCAIYCNACNGCTGGAYTNGGAYTNGNAAARGGNGAYTNGNATHYTNATG 1080
QY 1162 TGCAAAAAGGTGCAATGGAGCTTCTGACAGCTCATCATGAGATGGGGCATATCCAG 1221
Db 1081 TGVACNAARGTNACNATGGAYGATTYTNNACNGCNCAYCAYGARATGGGNCAYATHCAR 1140
QY 1222 TATGATATGGCATATGCTGCACAACTTTCTGCTAAGAAATGGAGCTTAATGAAGATTTC 1281
Db 1141 TAYGATATGGCNTAYGNCNCARCCNTTYTNTNMGNAAYGNGCNAAYCARGGNTTY 1200
QY 1282 CATGAGCTGTTGGGNAATCATGCTCACTTCTGCGAGCCACACCTTAAGCATTTAAATCC 1341
Db 1201 CAYGARGCNGTNGNGARATHATGWSNTNWSNCGNCNACNCCNAAARCAAYTNAARWSN 1260
QY 1342 ATTGGCTCTGTACCCGATTTTCAAGAGACATGAACAGAAATAAACTTCCCTGCTC 1401
Db 1261 ATHGGNTYTNWSNCCNGAYTTCARGAGAYAAAYGARACNARGARATHAAYTYTNTYTN 1320
QY 1402 AAACAGCACTCACGATTTGTTGGACTCTGCCATTTACTTACATCTTAGAGAGTGGAG 1461
Db 1461

Db 1321 AARCARCNYTNACNATHGTNGNACNTNCCNTTYACNTAYATGYTNGARAARTGOMGN 1380
QY 1462 TGGATGGCTTTTAAAGGGGAAATCCCAAAGACCACTGGATGAAARAAAGTGGTGGGAGATG 1521
Db 1381 TGGATGGTNTTYAARGNGARATHCCNNAARGAYCATGGATGAARAAARTGGTGGGARATG 1440
QY 1522 AACCGAGAGATAGTTGGGGTGGTGAACCTGTGCCCATATGTAACACATACTGTGACCCC 1581
Db 1441 AARMNGARATHGTNGNGTNGTNGARCCNGTNCNCAYGAYGARACNTAYTGYGAYCCN 1500
QY 1582 GCATCTCTGTTCCATGTTTCTTAATGATTACTCATTTCTGATATTTACAAAGGACCCCTT 1641
Db 1501 GCNWSNTNTTYCAYGTNWSNAAAYGAYTWSNTTYATHMGNATYATACNMGNAACNYTN 1560
QY 1642 TACCAATTCAGTTTCAAGAGACACTTGTCAAGCAGCTAAACATGAAGGCCCTCTGCGAC 1701
Db 1561 TAYCATTTTCARTTYCARGARGCNYTNTGYCARGCNGCNAARCAAYGARGCNGCNTNAY 1620
QY 1702 AAATGTGACATCTCAAACTCTACAGAACTGGACAGAACTGTTCAATATGCTGAGGCTT 1761
Db 1621 AARTGYGAYATHWSNAAAYWSNACNGCNGCNAARARYTNTTYAATGYTNMGNYTN 1680
QY 1762 GGAATATCAGAACCTGGAGCCCTAGCATTTGGAATTTGTTAGGAGCAAGAACATGAAT 1821
Db 1681 GGNAAARWSNGARCCNTGGACNYTNGCNYTNGARAAYGTNGTNGCNGNAAARAAYATGAAY 1740
QY 1822 GTAAAGCCCACTGCTCACTACTTGTGAGCCCTTATTTACCTGCTGAAAGACCAGAACAG 1881
Db 1741 GTNMGNCNCTNTNTAAYTAYTGTGACCCNTNTTYACNTGGTNTAARGAYCARAAAYAR 1800
QY 1882 AATTCCTTTTGGGATGCGAGTACGAGTCCATATGAGCAAGCAAGCATCAAGTGT 1941
Db 1801 AAYWSNTTYGTNGNTGGWSNACNGATGGWSNCCNTAYGNCNGAYCARWSNATHARGTN 1860
QY 1942 AGGATAAGCCTAAAATCAGCTCTTGGAGATAAAGCATATGAATGAAGCAACATGAATG 2001
Db 1861 MGNATHWSNTNAAARWSNCGNYTNGNGAYAAARCGNTAYGARTGGAAYGAYAGARTG 1920
QY 2002 TACCTGTTCCGATCATCTGTTGATATGCTATGAGCAGTACTTTTAAAAATGTAATAAT 2061
Db 1921 TAYTNTTYMGNWSNWSNGTNGCNTAYGCNATGMCNCARTAYTNTTYTNAARCTNAARAAY 1980
QY 2062 CAGATGATCTTTTGGGAGGAGGATGCGAGTGGCTTAATTTGAAACCAAGATCTCC 2121
Db 1981 CARATGATHYTNWTYGGNGARGARGAYGTNMGNTNGCNAAYTNAARCCNMGNATHWSN 2040
QY 2122 TTAATATCTTTGTCACCTGCACCTAAAATGTGCTGATATCATTCCTTAGAATCAAGTGT 2181
Db 2041 TTYAATYTTTYGTNACNCCNCAARAAAYGTNWSNGAYATHATHCCNMGNACNGARTN 2100
QY 2182 GAAAAGGCCATCAGGATGTCGCCGAGCCGATCAATGATGCTTTCCGPTCTGAATGACAAC 2241
Db 2101 GARAARGCNATHMGNATGWSNMGNWSNMGNATHAAAYGAYGCNTTYMGNTNAAAYGAYAY 2160
QY 2242 AGCCTAGAGTTTCTGGGATACAGCAACACTTGGACCTCTTAACAGGCCCTCTTTCC 2301
Db 2161 WSNYTNGARTTYTNGGNATHCARCCNACNYTNGGNCNCCNAAAYCARCCNCCNMGNSN 2220
QY 2302 ATATGGCTGATGCTTTTGGAGTGTGATGGGAGTGTAGTGGTGGCATTTGTCATCTG 2361
Db 2221 ATHGGYTNATHGTNTTYGGNGTNGTNGTNGTNGTNGTNGTNGTNGTNGTNGTNGTNGT 2280
QY 2362 ATCTTCACTGGGATCAGAGATCGGAAGAGAAAAATAAAGCAAGTGGAGAAAAATCCT 2421
Db 2281 ATHITYACNGGNATHMGNAYWGNARAARAARAAYAAARCCNMGNWSNGNGARAAAYCCN 2340
QY 2422 TATGCTCCATGATATTAGCAAGAGAAAAATAATCCAGGATTTCCAAAAACACTGATGAT 2481
Db 2341 TAYGONWSNATHGAYATHWSNAAARGNGGARAAYAAAYCCNGGNTTYCARAAAYACNGAYAY 2400
QY 2482 GTTCAGACCTCCTTT 2496
Db 2401 GTNCARACNWSNTTY 2415

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